

IN THE CLAIMS:

Please cancel claims 1-7, amend claims 8-15, and add claims 16 and 17 as follows.

1-7 (Canceled)

1 8. (Currently amended) Sample observation method characterized by
2 comprising steps of:

3 acquiring a reference sample image not including any defect on a sample
4 ~~by capturing an image of the sample with an imager~~, based on the information on a defect
5 developed on the sample and detected by an inspection apparatus;

6 moving the sample in a viewing field of the imager and acquiring a
7 defective sample image including the defect on the sample ~~by capturing a image of the~~
8 ~~sample at a first scale factor with the imager~~, based on the information on the defect
9 developed on the sample and detected by the inspection apparatus;

10 locating the defect on the defective sample image by comparing the
11 reference sample image and the defective sample image;

12 ~~capturing acquiring a magnified view of the local area where image of the~~
13 located defect ~~exists within the area whose view has been captured as the defective~~
14 ~~sample image, thus acquiring a magnified image of the defect at a second scale factor~~
15 ~~greater than the first scale factor with the imager without moving the sample; and~~

16 displaying the magnified image of the defect on a screen.

1 9. (Currently amended) Sample observation method characterized by
2 comprising the steps of:

3 acquiring a reference sample image not including any defect on a sample
4 ~~by capturing an image of the sample with an imager~~, based on the information on a defect
5 developed on the sample and detected by an inspection apparatus;

6 adjusting the a position of the sample so that the defect will fall within the
7 field of view of ~~image capture~~ said imager, based on the information ~~on the defect~~
8 developed ~~on the sample and detected by the inspection apparatus~~;

9 acquiring a defective sample image including the defect on the sample by
10 capturing an image of the sample in the adjusted position at a first scale factor by said
11 imager;

12 locating the defect on the defective sample image by comparing the
13 reference sample image and the defective sample image;

14 ~~capturing~~ acquiring a magnified ~~view of the local area where image of the~~
15 located defect ~~exists within the field view of image capture, thus acquiring a magnified~~
16 ~~image of the defect at a second scale factor greater than the first scale factor with said~~
17 ~~imager without changing the position of the sample~~; and

18 displaying the magnified image of the defect on a screen.

1 10. (Currently amended) Sample observation method ~~characterized by~~
2 according to claim 9 further comprising, subsequent to the step of acquiring a magnified
3 image, a step of:

4 acquiring a reference sample image not including any defect on a sample
5 ~~by capturing an image of the sample, based on the information on a defect developed on~~
6 ~~the sample and detected by an inspection apparatus~~;

7 acquiring a defective sample image including the defect on the sample by
8 ~~capturing an image of the sample, based on the information on the defect developed on~~
9 ~~the sample and detected by the inspection apparatus~~

10 locating the defect on the defective sample image by comparing the
11 ~~reference sample image and the defective sample image~~;

12 capturing a magnified view of the local area where the located defect
13 ~~exists within the area whose view has been captured as the defective sample image, thus~~
14 ~~acquiring a magnified image of the defect~~;

15 erasing the a background from the magnified image of the located defect;
16 and
17 displaying on a screen the magnified image of the defect from where the
18 background has been erased.

1 11. (Currently amended) Sample observation method according to
2 any one of claims 8, 9, and 10, characterized in that wherein the reference sample image
3 and the defective sample images are the images of the sample captured in secondary
4 electrons reflected emanated from the sample ~~irradiated with by irradiation of a charged~~
5 particle beams beam.

1 12. (Currently amended) Sample observation equipment intended An
2 apparatus for observing samples, characterized by comprising:
3 image pickup means to capture a view of a sample, thus for acquiring an
4 image of the a sample;
5 storage means to receive and store data about a desired information of an
6 area of to be observed on the sample, the view of the area to be captured by the image
7 pickup means, from the external;
8 a position control means controller to control the a position of the sample
9 toward with respect to the image pickup means, based on the data about the desired area
10 of the sample information stored into in the storage means;
11 display means to display images of the sample acquired by being captured
12 by the image pickup means; and
13 arithmetic control means to locate a defect on the sample by comparing a
14 plurality of images of the sample ~~zoomed in by first scale factor and~~ captured by the
15 image pickup means at a first scale factor after the sample is positioned by the position
16 control means controller and make the display means display an image of the defect
17 zoomed in by second scale factor that is larger than the first scale factor, together with an
18 image including the defect captured at the first scale factor to control the image pickup

19 means to acquire the located defect image at a second scale factor greater than the first
20 scale factor without changing the position of the sample.

1 13. (Currently amended) Sample observation equipment intended An
2 apparatus for observing samples, characterized by comprising:

3 storage means to receive and store the information on a defect developed
4 on a sample acquired through inspection with detected by an external defect inspection
5 apparatus from the defect inspection apparatus;

6 image pickup means to capture a view of the sample, thus for acquiring an
7 image of the sample;

8 position control means to control the a position of the sample, based on the
9 information on the defect developed on the sample stored into in the storage means;

10 defect locating means to locate the defect by comparing an image of the
11 sample not including the defect and an image of the sample including the defect,
12 zoomed in by first scale factor and captured wherein both of the images are acquired at a
13 first scale factor by the image pickup means after the sample is positioned by the position
14 control means, and display the image including the defect on a screen; and

15 magnified-defect display means to display a magnified an image of the
16 defect located by the defect locating means, the image and captured by the image pickup
17 means at a second scale factor that is larger greater than the first scale factor without
18 changing the position of the sample.

1 14. (Currently amended) Sample observation equipment intended An
2 apparatus for observing samples, characterized by comprising:

3 image pickup means to capture a view of a sample, thus for acquiring an
4 image of the sample;

5 position control means to control the a position of the sample so that a
6 defect on the sample will fall within the field of view of the image pickup means, based
7 on the information on the defect on the sample acquired through inspection with detected
8 by an external defect inspection apparatus;

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9 defect locating means to locate the defect by comparing an image of the
10 sample not including the defect and an image of the sample including the defect,
11 ~~zoomed in by first scale factor and captured wherein both of the images are acquired~~ by
12 the image pickup means at a first scale factor after the sample is positioned by the
13 position control means, ~~and display on a screen the image of the sample including the~~
14 ~~defect thus located; and~~

15 ~~magnified defect display means to display a magnified an image of a local~~
16 ~~area of the sample corresponding to the location of the defect on the image of the sample~~
17 ~~including the defect displayed on the screen of located by the defect locating means, the~~
18 ~~image and captured by the image pickup means at a second scale factor that is larger~~
19 ~~greater than the first scale factor without changing the position of the sample.~~

1 15. (Currently amended) Sample observation equipment according to
2 any one of claims 12 , 13 , and 14; ~~characterized in that wherein~~ the image pickup means
3 is a scanning electron microscope.

1 16. (New) Sample observation method according to claim 8, further
2 comprising steps of:

3 moving the sample to acquire a magnified image of the reference sample
4 with the imager;

5 acquiring a magnified image of the reference sample at the second scale
6 factor with the imager; and

7 displaying the magnified image of the reference sample on the screen with
8 the magnified image of the located defect.

1 17. (New) Sample observation method according to claim 9, further
2 comprising steps of:
3 moving the sample to acquire a magnified image of the reference sample
4 with the imager;
5 acquiring a magnified image of the reference sample at the second scale
6 factor with the imager; and
7 displaying the magnified image of the reference sample on the screen with
8 the magnified image of the located defect.
